EC centrifugal fan - RadiCal

backward curved, single inlet

R3G500-AL04-73 ebmpapst Datasheet
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Nominal data

Type	**R3G500-AL04-73**	
Motor	**M3G084-GF**	
Phase		1~
Nominal voltage	[VAC]	230
Frequency	[Hz]	50/60
Type of data definition		ml
Speed	[min^{-1}]	800
Power input	[W]	327
Current draw	[A]	2.1
Min. ambient temperature	[°C]	-25
Max. ambient temperature	[°C]	40

ml = max. load · me = max. efficiency · rfa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

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Technical features

Leackage current	<= 3,5 mA
Size	500 mm
Operation mode	S1
Direction of rotation	Clockwise, seen on rotor
Mounting position	Shaft horizontal or rotor on top; rotor on bottom on request
EMC harmonics	Acc. to EN 61000-3-2/3
EMC interference emission	Acc. to EN 61000-6-3 (household environment)
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
Humidity class	F3-1
Insulation class	"B"
Cable exit	Variable
Condensate discharge holes	None
Bearing motor	Ball bearing
Mass	9.8 kg
Material of electronics housing	Die-cast aluminium
Material of impeller	PP-GF40 plastic
Motor protection	Thermal overload protector (TOP) wired internally
Product conforming to standard	EN 60335-1: 2002 + AL11: 2004 + A1: 2004 + A12: 2006 + A2: 2006 + A13: 2008
Surface of rotor	Coated in black
Number of blades	7
Type of protection	IP 54
Protection class	I
Technical features	- Control input 0-10 VDC / PWM - Output 10 VDC, max. 1.1 mA - Over-temperature protected electronics / motor - Alarm relay - Line undervoltage detection - Motor current limit - Soft start
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C

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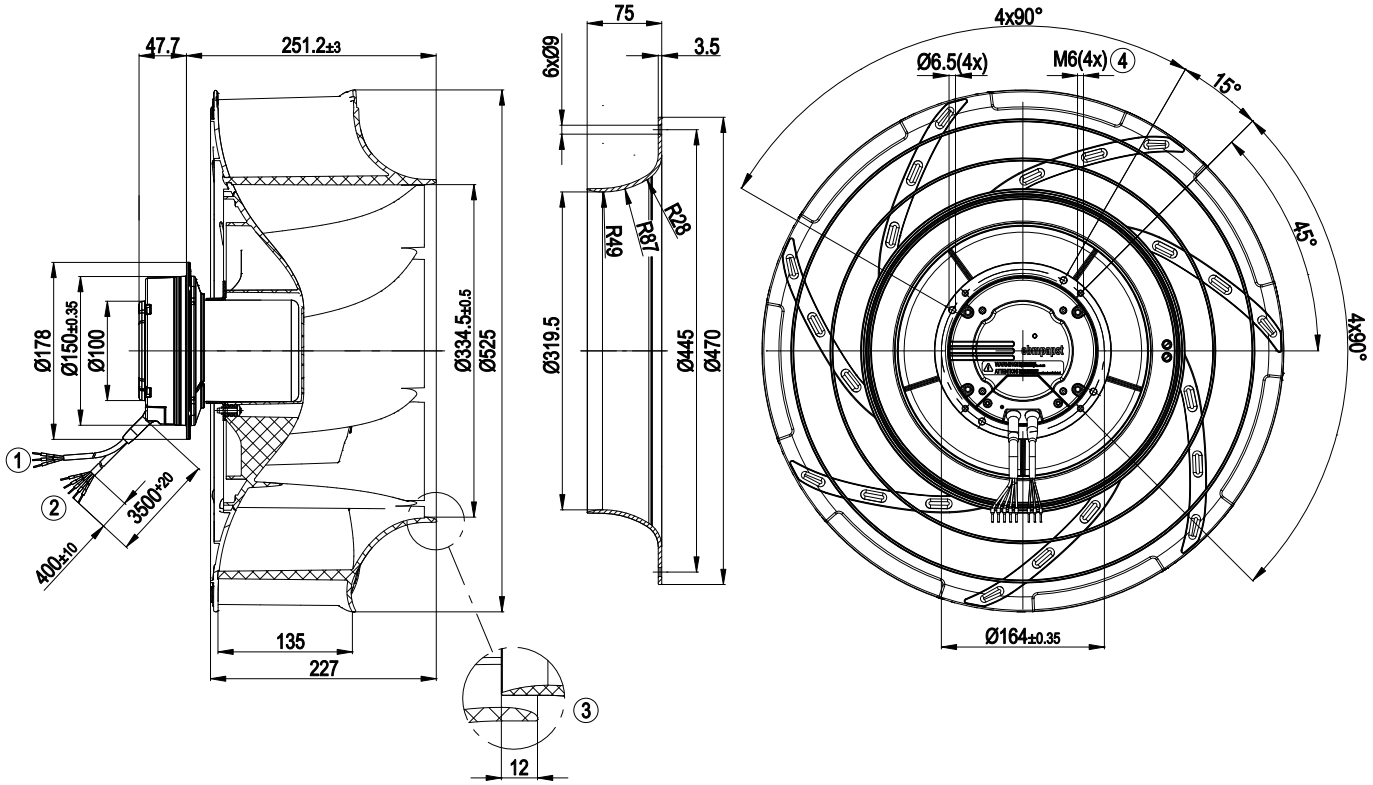
Product drawing



1	Connection line AWG22, 3 x crimped core-end sleeves
2	Connection line AWG18, 5 x crimped core-end sleeves
3	Accessory part: Inlet nozzle 50901-5-2943, not included in the standard scope of delivery
4	Depth of screw min. 8 mm, max. 10 mm

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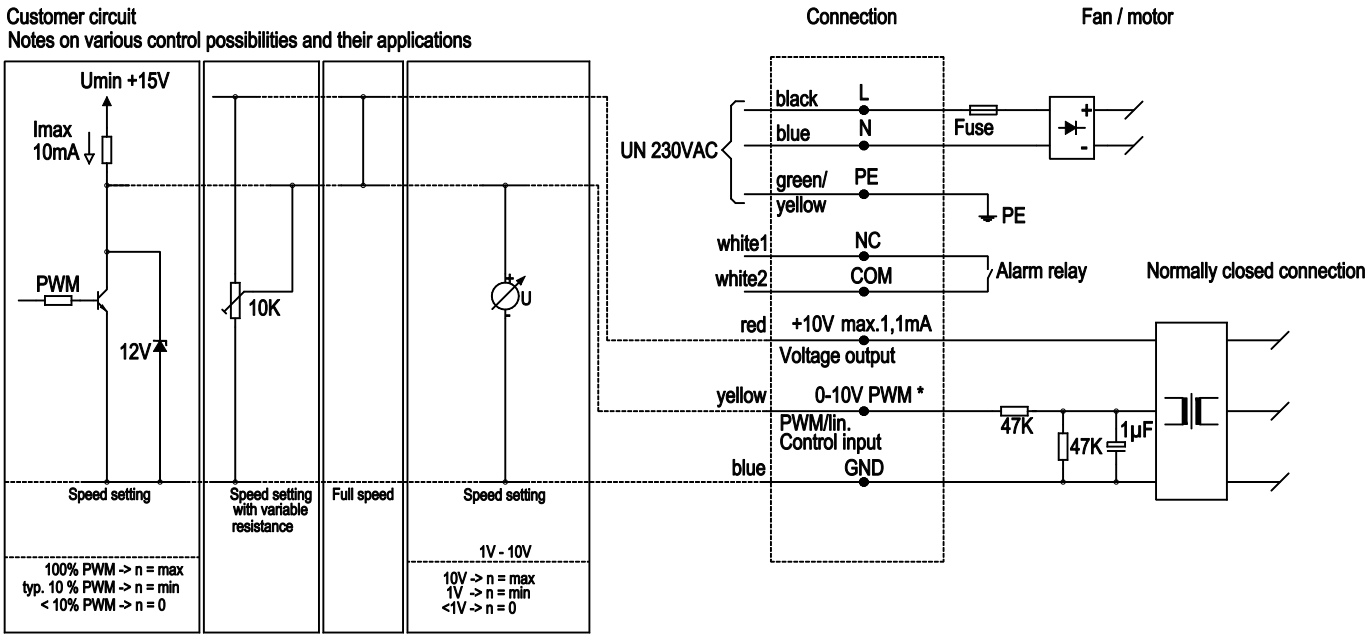
Connection screen



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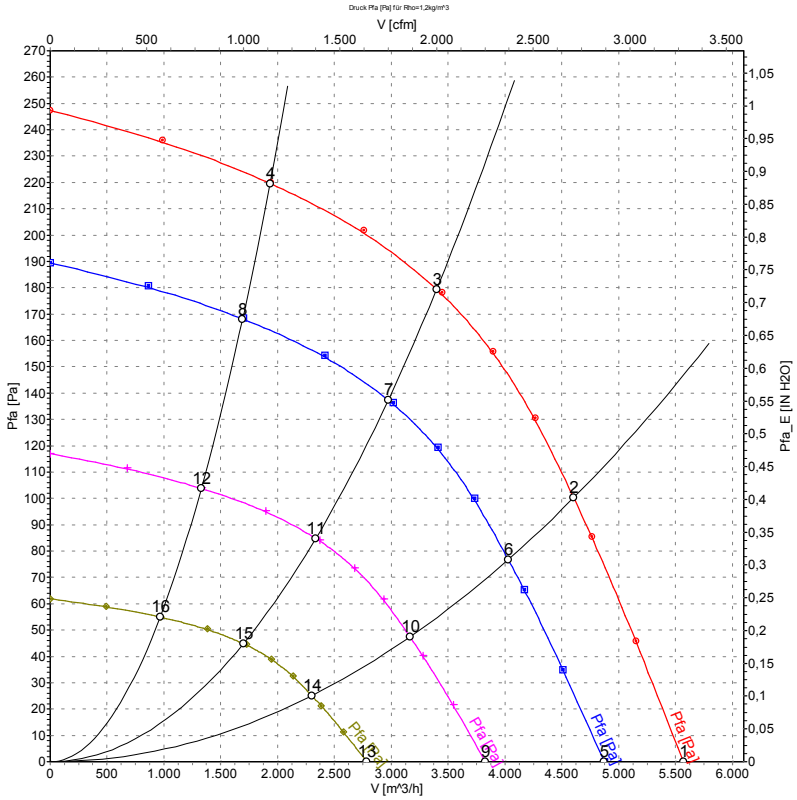
Charts: Air flow 50 Hz



Measured values

	U	f	n	P_1	I	LpA_{ss}	LpA_{ds}	LwA_{ss}	LwA_{ds}	$\dot{V}$	p_{fa}
	[V]	[Hz]	[min^{-1}]	[W]	[A]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[m^3/h]	[Pa]
1	230	50	800	201	1.23	59	57	66	72	5570	0
2	230	50	800	288	1.73	55	53	61	68	4605	100
3	230	50	800	327	2.10	52	49	58	64	3395	180
4	230	50	800	261	1.58	51	49	58	63	1935	220
5	230	50	700	135	0.83	56	54	63	69	4875	0
6	230	50	700	193	1.16	52	50	58	65	4030	77
7	230	50	700	216	1.29	49	46	55	61	2975	138
8	230	50	700	175	1.06	49	47	55	61	1690	169
9	230	50	550	65	0.40	51	49	58	64	3830	0
10	230	50	550	93	0.56	46	45	53	59	3165	47
11	230	50	550	105	0.63	44	41	50	56	2335	85
12	230	50	550	85	0.51	43	41	50	55	1330	104
13	230	50	400	25	0.15	44	42	51	57	2785	0
14	230	50	400	36	0.22	39	38	46	53	2300	25
15	230	50	400	40	0.24	37	34	43	49	1700	45
16	230	50	400	33	0.20	36	34	43	48	965	55